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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,280	10/27/2003	Nawfel Azami	545-USA	2771
26031	7590	06/07/2005	EXAMINER	
GEORGE J. PRIMAK 13480 HUNTINGTON MONTREAL, QC H8Z 1G2 CANADA			ROJAS, OMAR R	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/694,280

Applicant(s)

AZAMI, NAWFEL

Examiner

Omar Rojas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on October 27, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detailed Action.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The prior art documents submitted by applicant in the Information Disclosure Statement(s) filed on October 27, 2003 have all been considered and made of record (note the attached copy of form(s) PTO-1449).

### ***Oath/Declaration***

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities:
  - a. In claim 1, the abbreviation "SM" is used. However, the abbreviated term, "single mode," is missing from the claim.
  - b. The phrase "two arms of central zone" in line 3 of claim 1 appears grammatically incorrect.
  - c. The phrase "two input arms also made of SM fibers" in line 4 is considered somewhat ambiguous because it implies that two different sets of SM fibers are used in the invention. However, the specification only mentions one set of SM fibers (18, 20).

Appropriate correction is required.

***Allowable Subject Matter***

4. Claims 1-3 are allowed.

5. The following is an examiner's statement of reasons for allowance: The prior art, either taken alone or in combination, do not anticipate or suggest the claimed invention such that a rejection under 35 U.S.C. 102 or 103 would be proper. Patent No. 5,479,546 to Dumais et al. ("Dumais") discloses a Mach-Zender ("MZ") structure (Figures 7-8) having wavelength division multiplexer ("WDM") couplers, but fails to teach polarization maintaining ("PM") fibers spliced to single mode ("SM") fibers as recited by independent claim 1. Furthermore, Dumais does not disclose or suggest that his invention can be used as a polarization pump combiner ("PPC"). Patent No. 6,175,668 to Borrelli et al. ("Borrelli"), on the other hand, discloses a polarization combining device 10 having PM fibers (40, 50), but also does not teach or suggest splicing the PM fibers to SM fibers as recited by independent claim 1. Patent No. 6,597,833 to Pi et al. ("Pi") teaches a polarization combining device (see Figure 32) comprising PM fibers but does not teach or suggest splicing the PM fibers to SM fibers as recited by independent claim 1. Patent No. 6,813,398 to Taylor et al. ("Taylor") teaches connecting PM fibers to single mode waveguides of an MZ structure, but does not teach SM fibers spliced to PM fibers as recited by claim 1. Patent No. 5,920,666 discloses an all-optical fiber switch implemented within an MZ structure but does not teach or suggest splicing the PM fibers to SM fibers as recited by independent claim 1. Because none of the aforementioned prior art disclose or render obvious all the limitations of independent claim 1, claims 1-3 are deemed allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

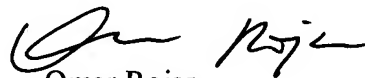
***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent No. 6,522,796 discloses a prior art polarization mode combiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Rojas whose telephone number is (571) 272-2357. The examiner can normally be reached on Monday-Friday (7:00AM-3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rod Bovernick, can be reached on (571) 272-2344. The official facsimile number for regular and After Final communications is (703) 872-9306. The examiner's RightFAX number is (571) 273-2357.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Omar Rojas  
Patent Examiner  
Art Unit 2874



AKM ENAYET ULLAH  
PRIMARY EXAMINER

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or

May 31, 2005